

## EXHIBIT C-1



Source: [https://na.panasonic.com/ns/271868\\_TOUGHPAD\\_FZ-G1\\_Spec\\_Sheet\\_012020.pdf](https://na.panasonic.com/ns/271868_TOUGHPAD_FZ-G1_Spec_Sheet_012020.pdf)

- Intel® Core™ i5-7300U vPro™ Processor
  - 2.6 GHz up to 3.5 GHz with Intel® Turbo Boost Technology
  - Intel Smart Cache 3MB
- Intel® Core™ i7-7600U vPro™ processor (Optional)
  - 2.8GHz up to 3.9GHz with Intel® Turbo Boost Technology
  - Intel Smart Cache 4MB

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You can set a start-up password to protect your computer from unauthorized use.

1. Set the password ( [Setting the Supervisor Password/User Password](#)), and select [Enabled] in [Password On Boot] and/or [Password On Resume] in the [Security] menu of the Setup Utility.

#### NOTE

- The [Password On Resume] of Setup Utility is effective when the computer was once shut down, and not effective when the computer resume from sleep.
- If the Supervisor Password or User Password has been set, the password input screen will be displayed on starting-up of the Setup Utility even though [Password On Boot] and/or [Password On Resume] is set to [Disabled]. If you set [Password On Boot] to [Enabled] and set [Password Or Reboot] to [Same as Boot], password input will also be required at Windows restart. ([Same as Boot] is the default setting.)

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FIG. 1



• **Windows Hello**

This function is used to sign in to Windows quickly, or perform individual authentication.

<Only for model with camera with IR sensor>

The face recognition for Windows Hellos is supported. To use Windows Hellos, perform the following steps for setup.

- 61 -

1. Touch  (Start) -  (Settings).
2. Touch [Accounts] - [Sign-in options].
3. Touch [Set up] under the "Windows Hello".
4. Follow the on-screen instructions.

**NOTE**

- To use Windows Hellos, you need to set the password and PIN for sign-in options.
- During face recognition, the IR sensor camera light turns on, and becomes hot. Do not touch the IR sensor section when the light is on, and shortly after the light turns off.

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FIG. 2

You can set a start-up password to protect your computer from unauthorized use.

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Password:

#### Setting the Supervisor Password/User Password

Set the Supervisor Password before setting the User Password.

1. Start up the Setup Utility. (  [Starting the Setup Utility](#))
2. Touch [Security] menu.
3. Double-touch [Set Supervisor Password] or [Set User Password].
4. Enter your password in [Create New Password] and touch <<Enter>>.
  - When the password has been set, you need to enter your password in [Enter Current Password] and touch <<Enter>>.
  - To disable the password, leave the input field empty and touch <<Enter>>.
5. Enter your password again in [Confirm New Password] and touch <<Enter>>.
6. Touch <<F10>>, and then select [Yes] and touch <<Enter>>.
 

When using the on-screen keyboard <<F10>> key, touch [SYM] - [F10].

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FIG. 3



• **Windows Hello**

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**NOTE**

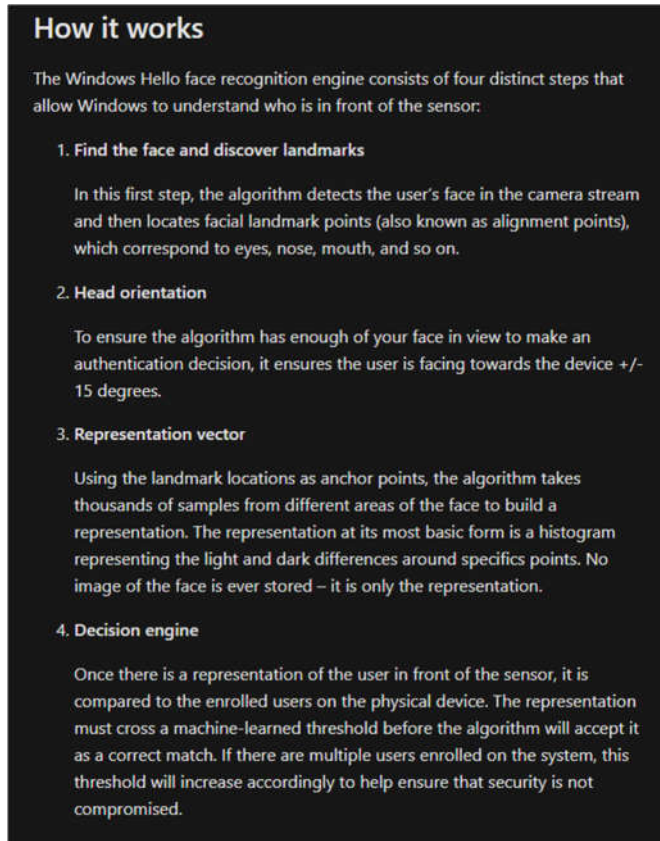
- To use Windows Hello, you need to set the password and PIN for sign-in options.
- During face recognition, the IR sensor camera light turns on, and becomes hot. Do not touch the IR sensor section when the light is on, and shortly after the light turns off.

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- 2 MP (1920 x 1080 pixels), 30fps[Video], Monaural Microphone
  - Infrared Sensor with Windows Hello support<sup>5</sup>
- 8MP rear camera with autofocus and LED flash

Source: [https://na.panasonic.com/ns/271868\\_TOUGHPAD\\_FZ-G1\\_Spec\\_Sheet\\_012020.pdf](https://na.panasonic.com/ns/271868_TOUGHPAD_FZ-G1_Spec_Sheet_012020.pdf)

FIG. 4



Source: <https://docs.microsoft.com/en-us/windows-hardware/design/device-experiences/windows-hello-face-authentication>

FIG. 5

You can set a start-up password to protect your computer from unauthorized use.

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#### NOTE

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### Setting the Supervisor Password/User Password

Set the Supervisor Password before setting the User Password.

1. Start up the Setup Utility. (  [Starting the Setup Utility](#))
2. Touch [Security] menu.
3. Double-touch [Set Supervisor Password] or [Set User Password].
4. Enter your password in [Create New Password] and touch <Enter>.
  - When the password has been set, you need to enter your password in [Enter Current Password] and touch <Enter>.
  - To disable the password, leave the input field empty and touch <Enter>.
5. Enter your password again in [Confirm New Password] and touch <Enter>.
6. Touch <F10>, and then select [Yes] and touch <Enter>.
 

When using the on-screen keyboard <F10> key, touch [SYM] - [F10].

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FIG. 6

#### Windows Hello

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1. Touch  (Start) -  (Settings).
2. Touch [Accounts] - [Sign-in options].
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#### NOTE

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#### How it works

The Windows Hello face recognition engine consists of four distinct steps that allow Windows to understand who is in front of the sensor:

##### 1. Find the face and discover landmarks

In this first step, the algorithm detects the user's face in the camera stream and then locates facial landmark points (also known as alignment points), which correspond to eyes, nose, mouth, and so on.

##### 2. Head orientation

To ensure the algorithm has enough of your face in view to make an authentication decision, it ensures the user is facing towards the device +/- 15 degrees.

##### 3. Representation vector

Using the landmark locations as anchor points, the algorithm takes thousands of samples from different areas of the face to build a representation. The representation at its most basic form is a histogram representing the light and dark differences around specific points. No image of the face is ever stored – it is only the representation.

##### 4. Decision engine

Once there is a representation of the user in front of the sensor, it is compared to the enrolled users on the physical device. The representation must cross a machine-learned threshold before the algorithm will accept it as a correct match. If there are multiple users enrolled on the system, this threshold will increase accordingly to help ensure that security is not compromised.

Source: <https://docs.microsoft.com/en-us/windows-hardware/design/device-experiences/windows-hello-face-authentication>

FIG. 7



**When you start the Setup Utility with Supervisor Password**

- You can make the settings of all items of the Setup Utility.

**When you start the Setup Utility with User Password**


- Note the following:
  - In the [Advanced] and [Boot] menus, you cannot make the settings of all items.
  - In the [Security] menu, you can change only the User Password when [User Password Protection] is set to [No Protection]. You cannot delete the User Password.
  - In the [Exit] menu, you cannot make the setting of [Load Default Values] and [Boot Override].
  - ◀ F9 ▶ (Setup Defaults) does not function.

To set Setup Utility, alternatively you can use touch input and pen input.

**Using touch screen:**

Double-touch the setting value to be changed, select the new value, and touch it again.

**Using on-screen keyboard:**

To input characters and symbols, touch  at the upper right corner of the Setup Utility screen to display the on-screen keyboard.

ESC	1	2	3	4	5	6	7	8	9	0	BKSC
q	w	e	r	t	y	u	i	o	p	ENTER	
a	s	d	f	g	h	j	k	l	;	SPACE	
z	x	c	v	b	n	m	CAP	←	→	SYM	

To operate special keys such as a function key, touch [SYM] on the on-screen keyboard so that the key is highlighted as illustrated below.

F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
`	~	~	~	!	@	#	\$	%	^	ENTER	
&	*	(	)	_	+	[	]	\	{	}	SFC
	:	"	;	'	-	/	<	>	?	SYM	


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## Setting the Supervisor Password/User Password

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Set the Supervisor Password before setting the User Password.

- Start up the Setup Utility. (  [Starting the Setup Utility](#) )
- Touch [Security] menu.
- Double-touch [Set Supervisor Password] or [Set User Password].
- Enter your password in [Create New Password] and touch ◀ Enter ▶ .
  - When the password has been set, you need to enter your password in [Enter Current Password] and touch ◀ Enter ▶ .
  - To disable the password, leave the input field empty and touch ◀ Enter ▶ .
- Enter your password again in [Confirm New Password] and touch ◀ Enter ▶ .
- Touch ◀ F10 ▶ , and then select [Yes] and touch ◀ Enter ▶ .  
When using the on-screen keyboard ◀ F10 ▶ key, touch [SYM] - [F10].

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FIG. 8

## Password:

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## Face unlock:

### Enrollment

Enrollment is the step of generating a representation or set of representations of yourself (for example if you have glasses you may need to enroll with them and without them) and storing them in the system for future comparison. This collection of representations is called your enrollment profile. Microsoft never stores an actual image and your enrollment data is never sent to websites or applications for authentication.

<https://docs.microsoft.com/en-us/windows-hardware/design/device-experiences/windows-hello-face-authentication>

FIG. 9

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FIG. 8